administrative infrastructure! and technical support to glaciological studies in the Indus, Ganga and Brahmaputra basins. While concerentrising details of this new initiative, the knowledge of the community of glaciologists in the country regarding the activities of Glaciology Research Centre, Moscow and Lanzhon Institute Glaciology and Geo-cryology, Chine have been taken into account.

Operationalising 'SARAS'

5505. SHRIYADLAPATIVENKAT RAO: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) by when the multi-role 'SARAS' Aircraft is likely to be test flown;

(b) when the work on this project was started and what was the target date for taking it to skies;

(c) the reasons for the delay in this regard; and

(d) the other details in this regard?

THE MINISTER OF SCIENCE AND TECHNOLOGY (DR. MURLI MANOHAR JOSHI): (a) to (d) The project on design fabrication and airworthiness testing of a multi-role Light Transport Aircraft 'SARAS' commenced after the financial sanction was issued on 24th September, 1999. The project envisaged building of two flying prototypes and one structural strength specimen and conducting flight tests leading to certification. The target for first flight of the first prototype was around 18 months from the date of release of funds *i.e.* by end of March, 2001. Owing to difficulties encountered in the procurement of crucial and critical parts from some Western-Nations and unforeseen technological problems, which have now been overcome, the first test flight has been rescheduled to December, 2002.

Research on earthquake

5506. SHRI C. RAMACHANDRAIAH: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether Government propose to take up various new research activities on earthquake;

(b) if so, what are the details of the new research initiatives;

(c) whether any efforts are also proposed for finding out ways to get advance intimation on earthquakes; and

(d) if so, the details thereof?

THE MINISTER OF STATE IN THE DEPARTMENT OF SCIENCE AND TECHNOLOGY IN THE MINISTEY OF SCIENCE AND TECHNOLOGY (SHRI BACHI SINGH RAWAT): (a) and (b) Yes, Sir. The Department of Science and Technology has been supporting a major programme on earthquake studies. Recently new research initiatives have been taken up using space technologies such as GPS, SAR Interferometry and other ground based technological tools like digital seismometry and boreholde studies to map the geological features, Microzonation studies of a few representative cities like Delhi, Jabalpur and Sikkim have also been initiated.

(c) and (d) At present there is no scientific technique available any where in the world which can predict the occurrence of earthquake with reasonable degree of accuracy in terms of space, time and magnitude. However, efforts are on the world over, to establish the correlation between eqarthquake precursors and its occurrence.

Researches for advance information about human bombs

†5507. SHRI DEVI PRASAD SINGH: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether any research to get advance information about dangers of human bombs or living-being bombs and to de-activate the same is going on in the country; and

(b) whether the requisite technology or resources are available indigenously for undertaking such research?

THE MINISTER OF STATE IN THE DEPARTMENT OF SCIENCE AND TECHNOLOGY IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BACHI SINGH RAWAT): (a) No, Sir.

(c) Doesn't arise.

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†Original notice of the question was received in Hindi.